



Impact of Pharmacist Assertiveness Training in Recommending Pneumococcal Vaccination among High-Risk Adults

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Background

- Community pharmacists are valuable entities on the front lines of public health, and the number of pharmacists trained to vaccinate is up 600% since 2007.^{1,2}
- Adult rates of pneumococcal vaccination have failed to meet Healthy People 2020 goals despite pharmacists' immunization programs.^{3,4}
- A new training program was created that is rooted in health behavior, patient communication, sales techniques, and simulation-based education to holistically prepare community pharmacists to overcome vaccine hesitancy.

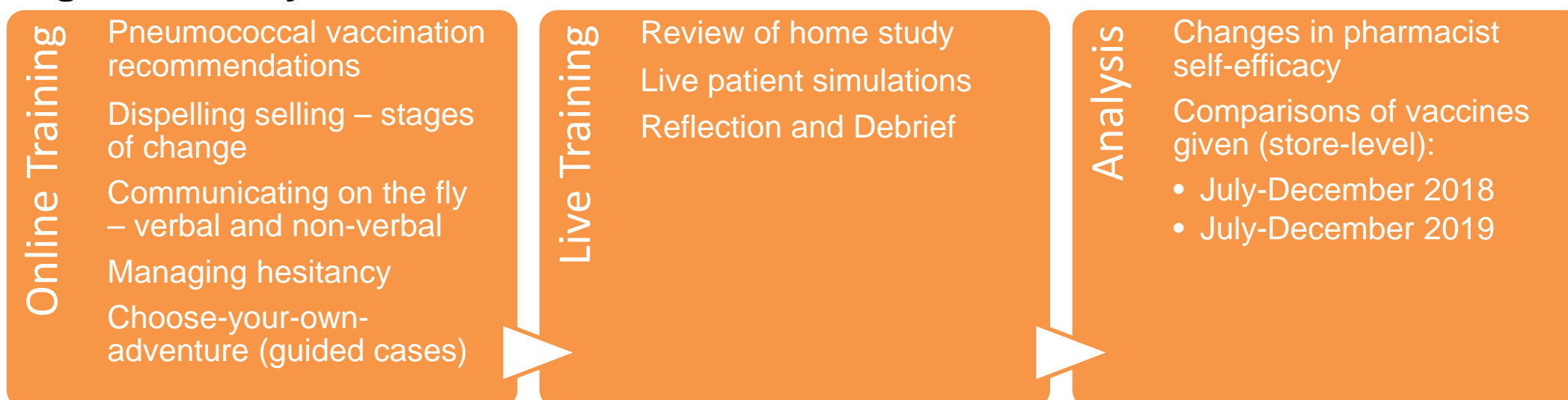
Objective

To improve pneumococcal vaccination rates in high-risk adults through assertive communication and heightened vaccine promotion by community pharmacists'.

Methods

- A multi-phase vaccine hesitancy and communication workflow training program (Figure 1) was implemented in two regions of a nationwide chain community pharmacy (Memphis and Nashville, TN)
 - Phase 1: Five part on-line module (Self-study)
 - Phase 2: Live, in-person session
- The live component used standardized patients at the UTHSC Center for Healthcare Improvement and Patient Simulation.
- Pharmacies (N=100) were randomized to three groups: 1) no training (control); 2) online training only; and 3) online plus live training
- Surveys evaluating vaccination self-efficacy were completed before and after the training and analyzed using Mann-Whitney U tests.⁵
- Changes in adult vaccines given (year-over-year) were provided by the partner pharmacy (Walgreens) and analyzed by general linear models

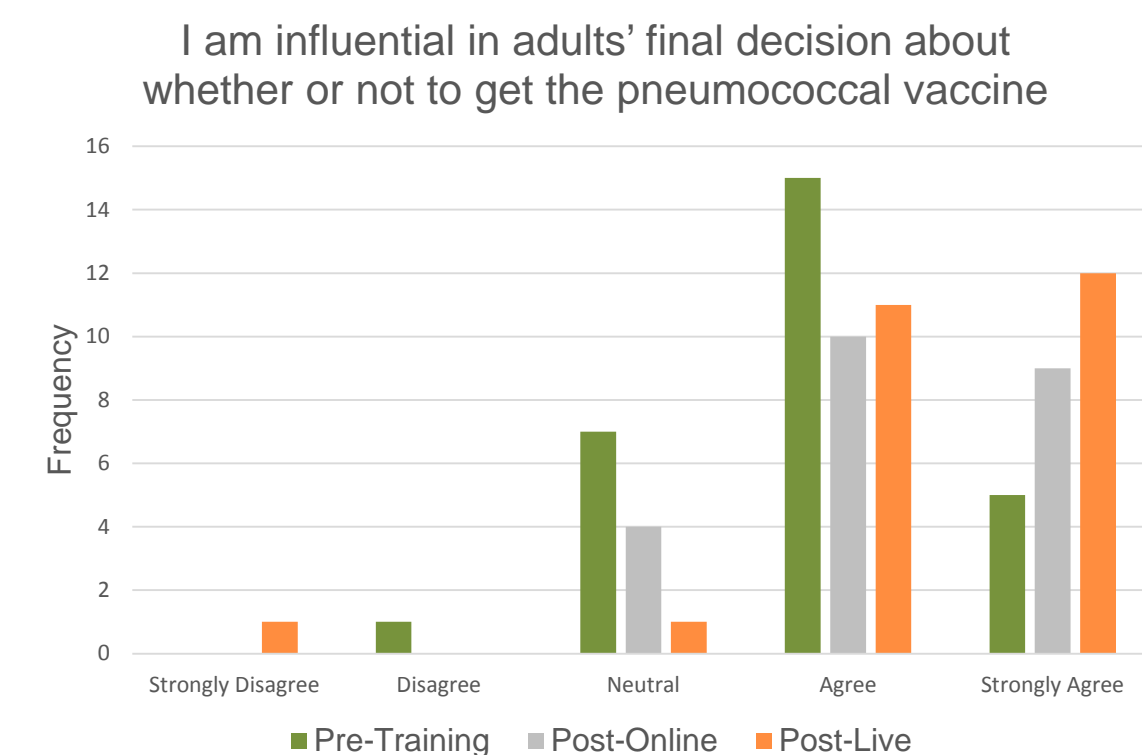
Figure 1. Study Workflow



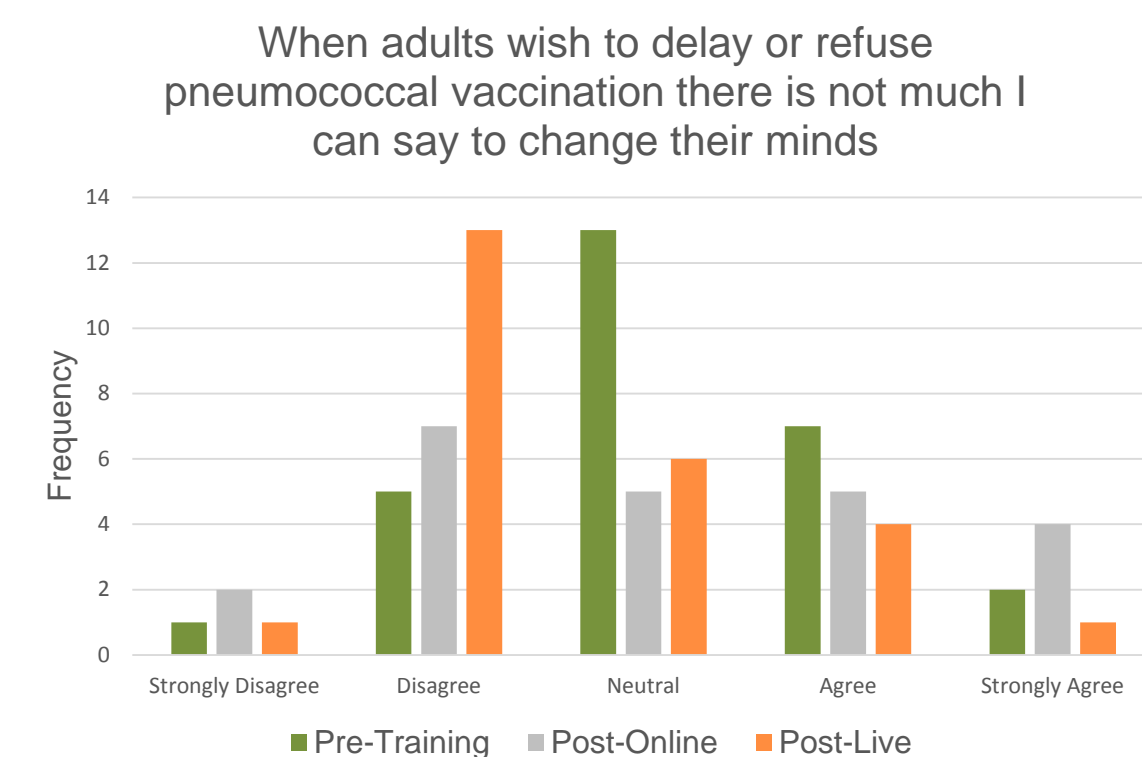
Results

Figure 2. Training Impact on Self-Efficacy

Panel A. Influence



Panel B. Changing Minds



Panel C. Managing Hesitancy

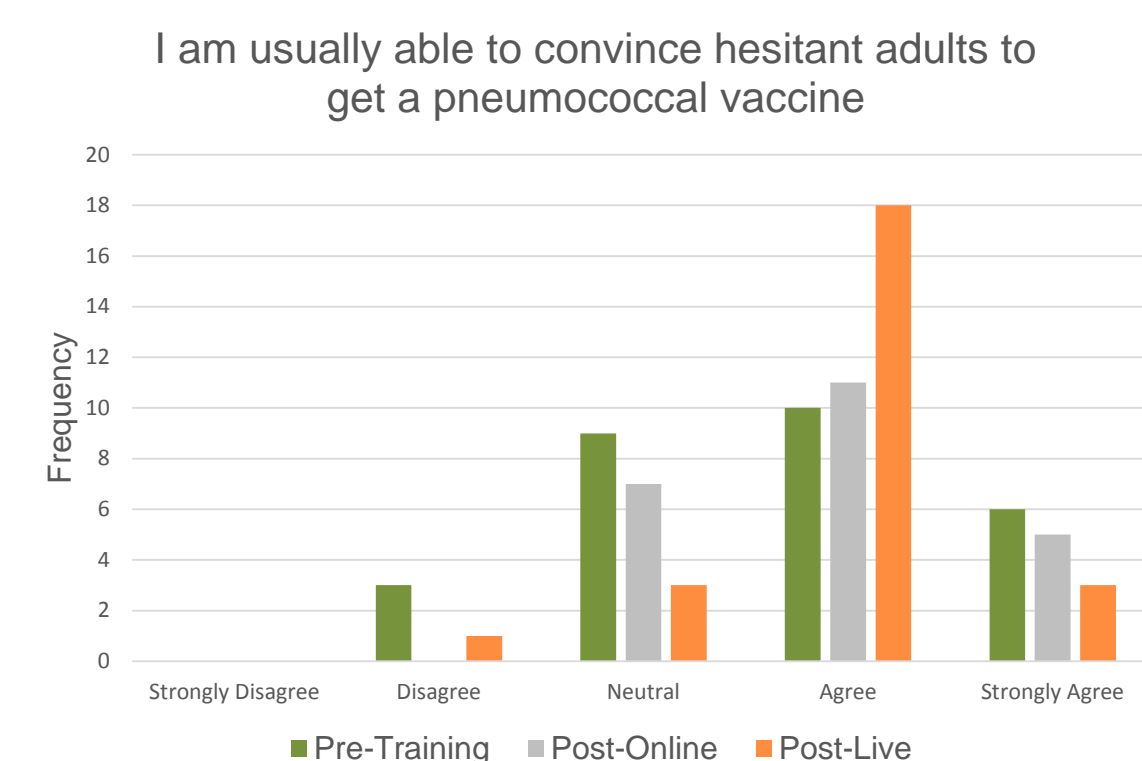
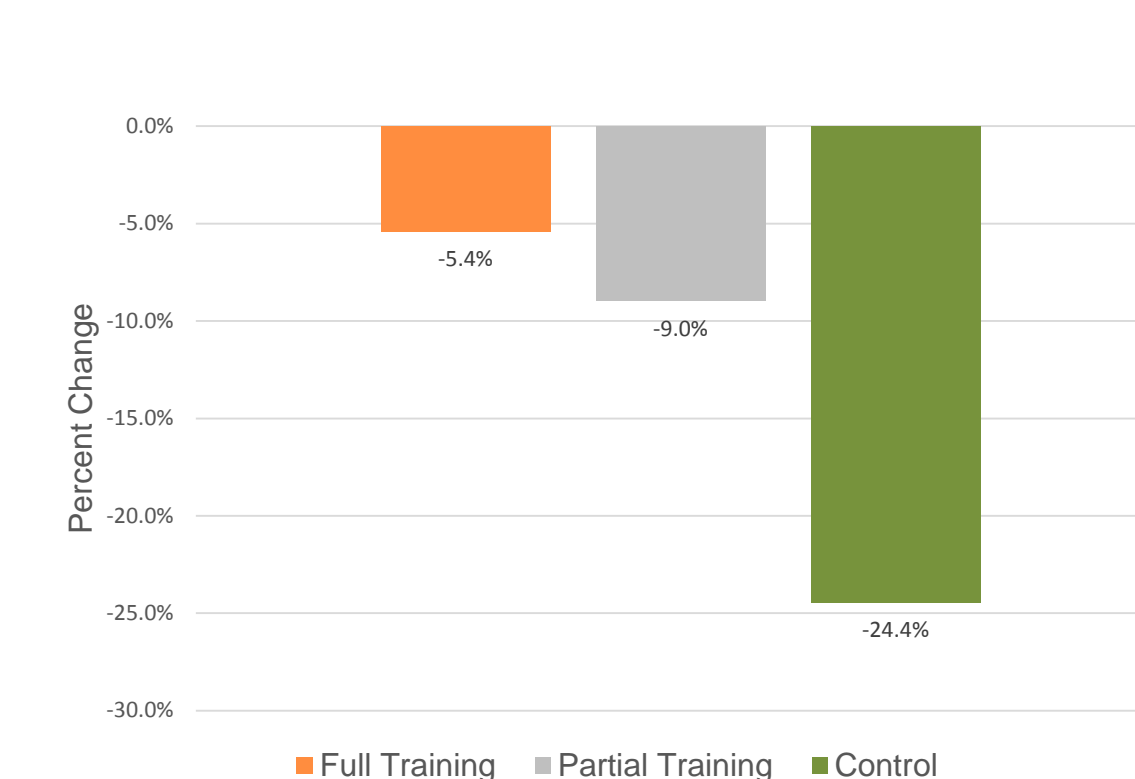
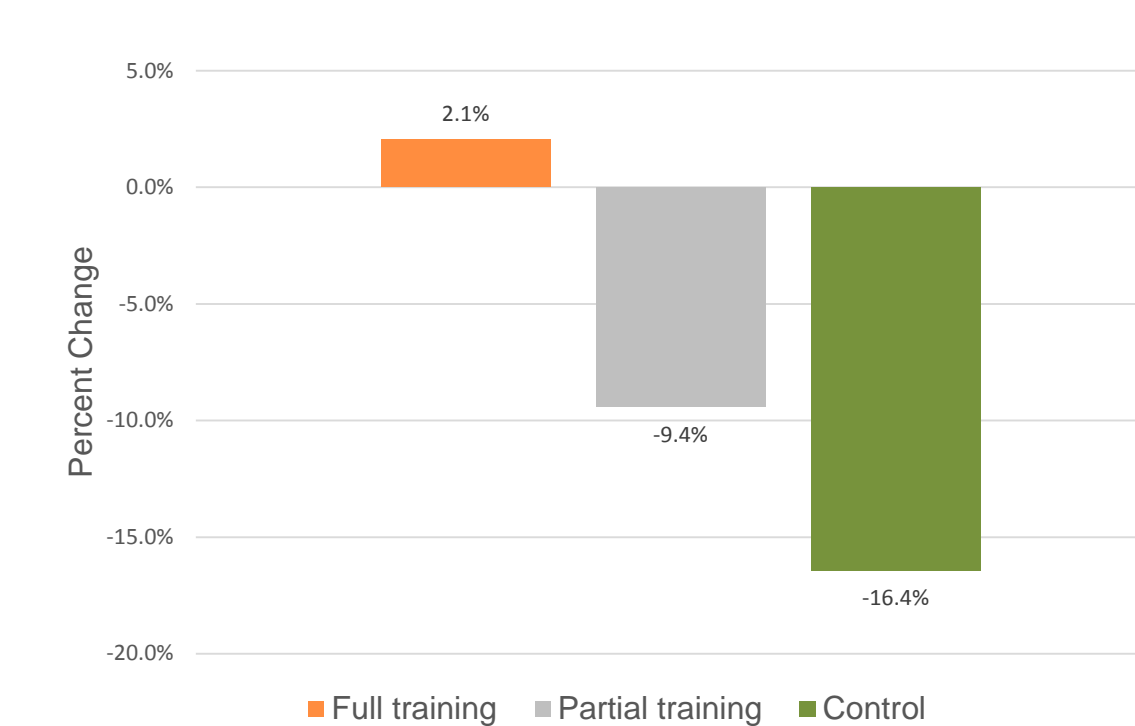


Figure 3. Program Impact on Adult Vaccination

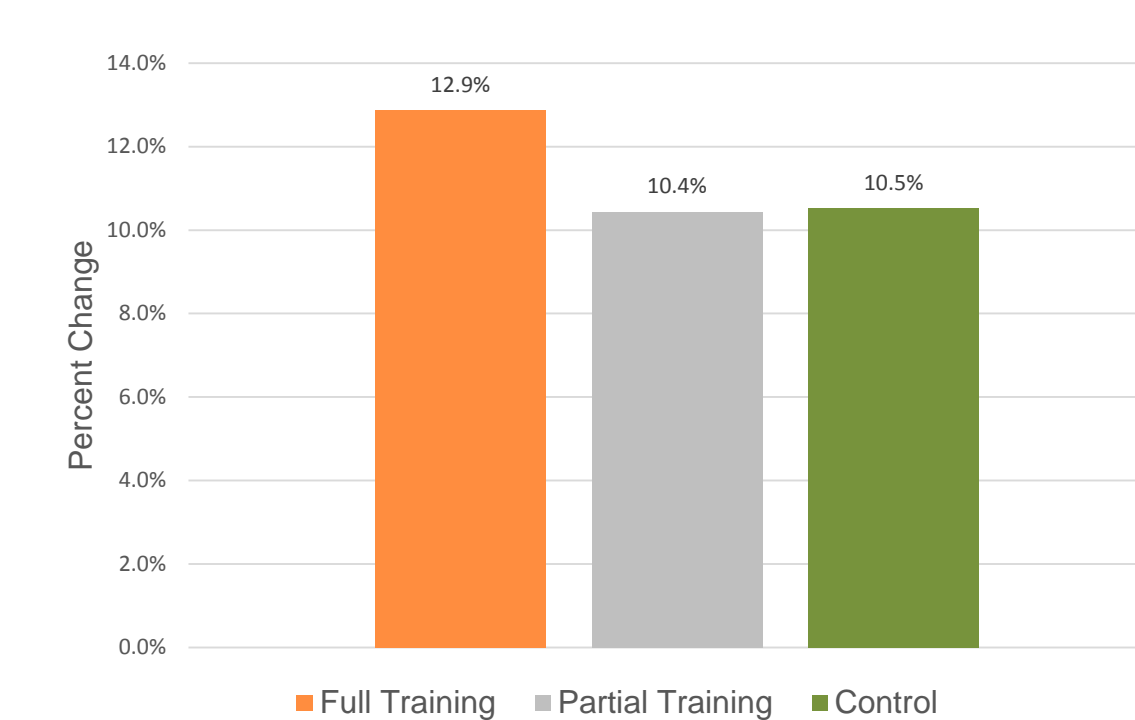
Panel A. All Pneumococcal Vaccination



Panel B. High-Risk Pneumococcal Vaccination



Panel C. Seasonal Influenza Vaccination



- Across the two engaged regions (N=100), 50 pharmacies completed their assigned training (N=50 for control)
- Small improvements in pharmacist vaccine-related self-efficacy were observed (Figure 2) with significant changes realized after full training but only related to “changing minds” (p<0.05) (Panel B)
- Between identical 6-month periods in 2018 and 2019, the number of pneumococcal vaccines given across all locations declined irrespective of study group (Figure 3, Panel A)
- A small increase in pneumococcal vaccines given to high-risk adults was observed in the full training group (2.1%) vs. declines in both the partial training and control groups (both p>0.05) (Figure 3, Panel B)
- Although not a focus of the program, increases in influenza vaccines given were seen in all groups, with slightly larger increases (p>0.05) observed in the full training group (Figure 3, Panel C)

Conclusions

- Provider vaccination self-efficacy may be improved through an evidence-based communication training program focused on overcoming vaccine hesitancy in adults.
- Observed differences suggest that provider education—in the context of patient engagement—may benefit from live, active learning above and beyond simple didactic instruction.
- Similar, future programs could benefit from focusing on the holistic vaccination needs of adults rather than narrowing the emphasis to one particular patient subgroup.

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Disclosures

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